UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,568	05/01/2001	Michael Christopher Martin	RSW920010076US1	4861

26502	7590	06/06/2005

IBM CORPORATION
IPLAW IQ0A/40-3
1701 NORTH STREET
ENDICOTT, NY 13760

EXAMINER
CHANG, JUNGWON

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*17 February 2005*</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-11*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-11*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/1/2001</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

FINAL ACTION

1.   This action is responsive to amendment filed on 2/17/2005. Claims 1-11 are

presented for examination.

2.   The objection is withdrawn based on amendment filed on 2/17/2005.

3.   The rejection under 112, second paragraph, is withdrawn based on amendment

filed on 2/17/2005.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by

Myerson (US 5,892,917).

6.   As to claim 1, Myerson discloses the invention as claimed, including a method for

adapting to change in the demand on a web server (104, fig. 1) (col. 1, lines 8-17 and

49-53; col. 2, lines 49-57), comprising the acts of:

       associating session tracking objects (150-156, fig. 2; 170-182, fig. 3) with

browsers (i.e., browser, 116, fig. 1; col. 4, lines 10-14) that access a web server (104,

fig. 1) (col. 3, lines 13-20; col. 4, lines 35-46; col. 4, line 62 – col. 5, line 22; col. 5, lines

46-49 and 64-67), wherein the session tracking objects include identifications of web

pages requested by the browsers (i.e., HTTP command, 175, fig. 3; Object ID, 176, fig.

3; col. 5, lines 46-49; URL, col. 5, line 64 – col. 6, line 9); and

analyzing the identifications of web pages requested by the browsers to

determine caching priorities (i.e., statistically, certain www pages tend to be much more

popular than other, especially the home pages of popular web sites, and those pages

tend to be cached; col. 1, line 65 – col. 2, line 21; col. 2, lines 22-26; analyzing a web

site log file that compensates for information caching; col. 2, lines 50-57; high object

caching rate, high rates of object caching; col. 8, line 54 – col. 9, line 29; weight data

representing the relative frequency of requests for the various objects associated with

the Web site; col. 3, lines 25-27; col. 4, lines 62-67; col. 6, lines 54-61) for the server

(fig. 6; weight data representing the relative frequency of requests for the various

objects associated with the Web site; col. 4, line 62 – col. 5, line 22; col. 8, lines 54-65;

col. 9, lines 5-29).

7.   As to claim 4, Myerson discloses the session tracking objects are HTTP session

objects (col. 5, lines 46-49; col. 7, lines 1-3).

8.   As to claim 5, Myerson discloses the caching priorities are proportional to relative

frequencies of browser requests for web pages (i.e., weight data representing the

relative frequency of requests for the various objects associated with the Web site; col.

3, lines 25-27; col. 4, lines 62-67; col. 6, lines 54-61; high object caching rate; col. 8,

lines 57-65).

9.   As to claim 6, Myerson discloses the caching priorities are proportional to

recency of browser requests for web pages (col. 5, lines 15-22).

10.   As to claims 7 and 8, Myerson discloses the act of analyzing is performed

periodically (col. 4, lines 35-46) and in response to a triggering event (i.e., web page

request (object request) frequency data is updated; col. 8, lines 44-46 and 54-65).

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Myerson (US 5,892,917), in view of Ronald et al. (US 2003/0041143), hereinafter

referred to as Ronald.

13.   As to claims 2 and 3, Myerson discloses identifications of web pages requested

by the browsers (i.e., HTTP command, 175, fig. 3; Object ID, 176, fig. 3; col. 5, lines 46-49; URL, col. 5, line 64 – col. 6, line 9). However, Myerson does not specifically disclose the identifications of the last N pages requested by each of the browsers and N is five. Ronald discloses the identifications of the last N pages requested by each of the browsers (fig. 5; page 5, [0069], [0070]) and N is five (i.e., if user starting from page E – D – G – M – N, then N is five; or if user starting from page F – D – G – M – N, then N is five; fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Myerson and Ronald because Ronald's identification of the requested last pages would allow the web server to determine the popularity of each web page by analyzing the number of times users have visited the web pages.

14.   Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myerson (US 5,892,917), in view of Glance et al. (US 6,415,368), hereinafter referred to as Glance.

15.   As to claim 9, Myerson discloses the invention substantially as claimed, including a method for adapting to change in the demand on a web server (104, fig. 1) (col. 1, lines 8-17 and 49-53; col. 2, lines 49-57) comprising the acts of:

associating session tracking objects (i.e., session ID; col. 3, lines 13-20) with browsers (i.e., browser, 116, fig. 1; col. 4, lines 10-14) that access a web server (104, fig. 1) (, wherein the session tracking objects include identifications of web pages (i.e.,

URL) requested by the browsers ; and

analyzing the identifications of web pages requested by the browsers to

determine caching priorities (i.e., weight data representing the relative frequency of

requests for the various objects associated with the Web site; col. 3, lines 25-27; col. 4,

lines 62-67; col. 6, lines 54-61; high object caching rate; col. 8, lines 57-65; high rates of

object caching; col. 9, lines 5-7) for the server (fig. 6; weight data representing the

relative frequency of requests for the various objects associated with the Web site; col.

4, line 62 – col. 5, line 22; col. 8, lines 54-65; col. 9, lines 5-29).

16.   Myerson does not specifically disclose altering a server cache responsive to the

caching priorities. However, Glance discloses altering a server cache responsive to the

caching priorities (i.e., caching replacement algorithm; col. 1, lines 31-45; calculate

priority weight of URL, update cache index, 68, fig. 2; update cache index with URL,

weight, timestamp, 86, fig. 3;col. 8, lines 21-23). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine the teachings of

Myerson and Glance because Glance's altering the server cache would improve quality

of service of Myerson's system by allowing the server cache to update cache priorities

based on ranking the web pages according to the frequency of requests and the

recency of requests.

17.   As to claims 10 and 11, they are rejected for the same reasons set forth in claim

9 above. In addition, Glance discloses the altering further includes the act of re-loading

(i.e., refreshing or updating) at least part of the server cache (col. 1, lines 31-45 and 60-67; 68, fig. 2; 86, fig. 3;col. 8, lines 21-23), and the act of altering a cache algorithm associated with the server cache (i.e., caching replacement algorithm; col. 1, lines 31-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Myerson and Glance because Glance's re-loading and altering the cache would allow the server cache to update cache priorities based on ranking the web pages according to the frequency of requests and the recency of requests.

18.   Applicant's arguments filed on 2/17/2005 have been fully considered but they are not persuasive.

19.   In the remarks, applicants argued in substance that

(1)   Myerson does not disclose or even suggest analyzing any information to determine caching priorities as recited, inter alia, by claim 1.

20.   Examiner respectfully traverses applicant's remarks.

As to point (1), applicant is silent regarding the examiner's citations of col. 8, lines 57-65, and col. 9, lines 5-7 of Myerson for caching priorities in a prior office action dated 11/17/2004. Furthermore, Myerson clearly teaches analyzing any information (recently accessed web pages; col. 1, line 65 – col. 2, line 5; most popular pages; col. 2, lines 6-21) to determine caching priorities (statistically, certain www pages tend to be much

more popular than other, especially the home pages of popular web sites, and those pages tend to be cached; col. 1, line 65 – col. 2, line 21; col. 2, lines 22-26; analyzing a web site log file that compensates for information caching; col. 2, lines 50-57; high object caching rate, high rates of object caching; col. 8, line 54 – col. 9, line 29).

21.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JWC
May 25, 2005

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100